

Title (en)

METHOD AND APPARATUS OF HIGH SPEED PROPERTY MAPPING

Title (de)

VERFAHREN UND VORRICHTUNG ZUR SCHNELLEN EIGENSCHAFTSABBILDUNG

Title (fr)

PROCEDE ET APPAREIL DE CARTOGRAPHIE D'UNE PROPRIETE A HAUTE VITESSE

Publication

**EP 1938040 A4 20091028 (EN)**

Application

**EP 06804274 A 20060929**

Priority

- US 2006038211 W 20060929
- US 72177705 P 20050929
- US 53753506 A 20060929

Abstract (en)

[origin: WO2007041374A2] A probe instrument having a probe that interacts with a sample surface to perform a mechanical property measurement at high speed includes a scanner producing relative motion between the sample and the probe. In addition, a probe actuator produces relative motion between the sample and the probe, in a generally vertical direction, and a controller that generates a scanner drive signal and an actuator drive signal. The probe actuator is responsive to the actuator drive signal and has an operable bandwidth of at least about 50-80 kHz to perform the fast force curve measurements. The probe actuator is preferably located at least partially on the cantilever. Moreover, feedback during normal operation may be interrupted to perform a force curve measurement with the integrated actuator.

IPC 8 full level

**G01Q 10/04** (2010.01)

CPC (source: EP US)

**G01Q 10/04** (2013.01 - EP US); **G01Q 10/045** (2013.01 - EP US)

Citation (search report)

- [X] US 5866807 A 19990202 - ELINGS JEFFREY R [US], et al
- [A] US 5723775 A 19980303 - WATANABE SHUNJI [JP], et al
- [DXA] US 5224376 A 19930706 - ELINGS VIRGIL B [US], et al
- See references of WO 2007041374A2

Designated contracting state (EPC)

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DOCDB simple family (publication)

**WO 2007041374 A2 20070412; WO 2007041374 A3 20071108**; EP 1938040 A2 20080702; EP 1938040 A4 20091028; EP 1938040 B1 20181121; US 2007089498 A1 20070426; US 7658097 B2 20100209

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